UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,808	12/19/2003	Brent S. Baxter	884.B82US1	2599

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EXAMINER
XU, KEVIN K

ART UNIT	PAPER NUMBER
2628	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/741,808	BAXTER ET AL.
	Examiner	Art Unit	
	Kevin K. Xu	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _13 February 2007_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-20_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-5, 16-20 have been considered

but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 6-15 are rejected under 35 U.S.C. 101 because the claimed invention the

claimed invention is directed to non-statutory subject matter. Claims 6-15 lack the

practical application of producing a useful, concrete and tangible result (*See State

Street Bank v. Signature Financial Group*). Specifically claims 6 and 11 merely recite

acquiring an associated texture, generating shift instances of the associated texture,

blending one or more shifted instances of the associated texture, shifting the blended

texture to obtain a blended and shifted texture, applying the blended and shifted texture

and blending the object with the background. Thus, there is no tangible, concrete,

useful result in said claims. Examiner recommends including a recitation of "displaying

in succession the blended and shifted textures associated to the graphical user

interface object to create the illusion of motion." Thus, proper correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deering (6956576) in view of Lengyel ("Rendering with Coherent Layers") in further view of Becker (6392675) and Morgan (6756989).

Regarding claim 1 Deering explicitly teaches generating a plurality of blurred copies of an object including acquiring a plurality of objects and for each of the objects, shifting the object to form one or shifted objects, blending the one or more shifted objects and the object to form one of the plurality of blurred copies of the object and displaying in succession each one of the generated plurality of blurred copies of the object to created the illusion of motion. (Col 29 line 56- Col 30 line 18, Col 32 lines 32-40, Fig. 26) It should be noted that the object as taught by Deering may be considered an airplane propeller and samples representing the object (propeller) in each of its different positions (samples drawn at time T=1 to T=4 are blended to result in a motion blurred output pixel. Nonetheless Deering fails to explicitly teach objects blended to give the illusion of motion are associated with texture. This is what Lengyel teaches. (p. 1 introduction, p. 1 Fig. 2, p. 2 Section 1.1, p. 3 section 2.3, p. 4 section 3.2 and p. 4 section 3.4, p. 4 section 3.2 and p. 4 section 3.4) It should be noted Lengyel teaches the blended object is formed from blending texture image layers (p. 3 section 2.3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of objects associated with texture information into the system of Deering because employing textures provides factoring a rendering of a

scene into layers which allows target of resources, whether the ink and paint arts of

cartoons or the graphics pipeline to those parts of the scene that are most important.

(Abstract) Nonetheless neither Deering nor Lengyel teach the graphical user objects

creating an illusion of motion. This is what Becker teaches. (Col 4 lines 5-10, Col 5

lines 4-11, Fig. 2 and Fig. 4) It should be noted that the GUI object as taught by Becker

is a mouse cursor with path (movement) cursor takes identified by "pointer trails." It

would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of a graphical user object such as a mouse cursor with

pointer trails into the system of Deering because providing the functionality of utilizing

pointer trails for following movement of the cursor (Col 5 lines 4-11) can be realized and

thus, providing an additional utility of creating an illusion of motion for GUI objects can

be achieved. Lastly Deering, Lengyel and Becker fail to explicitly teach one pass

through a graphics-processing pipeline. This is what Morgan teaches (Col 2 lines 21-

31, Col 13-14 line 65-line 8) It would have been obvious to one of ordinary skill in the art

at the present time the invention was made to utilize one pass through a graphics

processing pipeline of Morgan into the system of Lengyel in order to generate blurred

copies of an object by applying multi-texturing because a one pass graphics processing

pipeline is more computationally efficient than multi-pass pipeline and thus, processing

time can be reduced.

Regarding claim 2, , Lengyel teaches generating a texture and shifting the

texture with respect to the object before applying the texture to the object. (p. 3 section

2.3 and p.4 section 3.2) It should be noted that Fig. 8 and Fig. 11 show shifting of

texture. (p.4 section 3.2 and p. 4 section 3.4) Furthermore, Lengyel teaches the texture layers are composited to produce the final image. (p. 3 section 2.3, Fig 2 and Fig. 6) and therefore, applying texture (compositing texture layers) to the object (final image) occurs after generating a texture and shifting the texture of each layered image (sprite). It would have been obvious to generate texture and shift said texture prior to applying texture of the object because said texture layers to be utilized for applying multi-texturing must be first generated prior to being applied it to the said objects.

Regarding claim 3, Deering teaches displaying a plurality of blurred copies of the object on a visual display. (Col 29 line 56- Col 30 line 18, Col 32 lines 32-40, Fig. 26)

Regarding claim 5, Deering teaches generating blurred copies of the object by applying multi-texturing to the object during one pass through the graphics processing pipeline further comprises displaying the blurred copies of the object on a visual display coupled to a communication device. (Fig. 5) It should be noted that the communication device as taught by Deering is a keyboard and/or mouse.

Claim 16 is similar in scope to claims 1 and 2 except for the recitation of a graphics processor coupled to texture memory. This is what Morgan teaches (Col 4 lines 51-67, Col 5 lines 58-64) It would have been obvious to one of ordinary skill in the art at the present time the invention was made to utilize a graphics processor coupled to texture memory of Morgan into the system of Lengyel in order to process texture information because graphics processors are designed to be very efficient at rendering and manipulating computer graphics.

Regarding claim 19, Deering teaches wherein the object displayed on the visual display provides the illusion of motion. (Col 29 line 56- Col 30 line 18, Col 32 lines 32-40, Fig. 26)   It should be noted that the object as taught by Deering may be considered an airplane propeller and samples representing the object (propeller) in each of its different positions (samples drawn at time T=1 to T=4 are blended to result in a motion blurred output pixel. Motivation to combine a graphical user interface object into the system of Deering is given in claim 16.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deering (6956576) in view of Lengyel ("Rendering with Coherent Layers") and Becker (6392675) in further view of Morgan (6756989) and Kato. (5999185)

Regarding claim 4, Lengyel fails to explicitly teach bump texturing. This is what Kato teaches. (Col 3, lines 25-33) It would have been obvious to one of ordinary skill in the art at the present time the invention was made to combine the teachings of bump texturing as taught by Kato into the system of Lengyel in order to generate blurred copies of the object by applying multi-texturing to the object because bump mapping provides the functionality of providing an uneven appearance of the surface, which can be put in a pattern of a rock face, a brass work or a water ring (Col 3, lines 28-31) and thus a more realistic texture representation can be achieved.

Claims 17-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deering (6956576) in view of Lengyel ("Rendering with Coherent Layers") and Becker (6392675) in further view of Morgan (6756989) and Kawahara (20050204306).

Regarding claim 17, Deering fails to explicitly teach a graphical user interface object. This is what Kawahara teaches. (p. 2 paragraphs 25 and 28, p. 3 paragraph 59, p. 5 paragraph 86 and Fig. 10) It should be noted that the graphical interface user object as taught by Kawahara is a graphical user interface window. It would have been obvious to one of ordinary skill in the art at the present time the invention was made to combine the teachings of a graphical user interface object into the system of Lengyel in order to apply shifted and blended texture information because window-based interfaces allow users to manipulate windows through a pointing device (such as a mouse) (p. 1 paragraph 5) and in addition, provides the functionality of rotating windows in a 3D display model, so that windows are viewed from an oblique angle through the 2D display, whereby the contents of the windows remain visible, while the windows occupy less space in the 2D display and are less likely to overlap each other. (p. 1 paragraph 17)

Regarding claim 18, Deering fails to explicitly teach a graphical user interface object comprises a graphical user interface window. This is what Kawahara teaches. (p. 2 paragraphs 25 and 28, p. 3 paragraph 59, p. 5 paragraph 86 and Fig. 10). It would have been obvious to one of ordinary skill in the art at the present time the invention was made to combine the teachings of a graphical user interface window into the system of Lengyel in order to apply shifted and blended texture information because window-based interfaces allow users to manipulate windows through a pointing device (such as a mouse) (p. 1 paragraph 5) and in addition, provides the functionality of rotating windows in a 3D display model, so that windows are viewed from an oblique

angle through the 2D display, whereby the contents of the windows remain visible, while the windows occupy less space in the 2D display and are less likely to overlap each other. (p. 1 paragraph 17)

Claim 20 is similar in scope to claim 19 except for the recitation of a graphical user interface window. This is what Kawahara teaches. (p. 2 paragraphs 25 and 28, p. 3 paragraph 59, p. 5 paragraph 86 and Fig. 10). It would have been obvious to one of ordinary skill in the art at the present time the invention was made to combine the teachings of a graphical user interface window into the system of Lengyel in order to apply shifted and blended texture information because window-based interfaces allow users to manipulate windows through a pointing device (such as a mouse) (p. 1 paragraph 5) and in addition, provides the functionality of rotating windows in a 3D display model, so that windows are viewed from an oblique angle through the 2D display, whereby the contents of the windows remain visible, while the windows occupy less space in the 2D display and are less likely to overlap each other. (p. 1 paragraph 17)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin K. Xu whose telephone number is 571-272-7747. The examiner can normally be reached on 8:30AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 571-272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
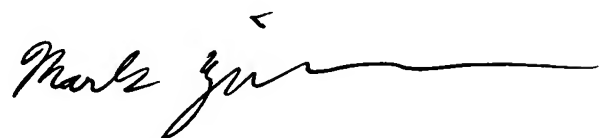
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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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3/12/07

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